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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,680	11/30/2001	Judith A. Bayer	9999	7365

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EXAMINER	
JEANTY, ROMAIN	
ART UNIT	PAPER NUMBER
3623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/998,680	BAYER ET AL.	
	Examiner	Art Unit	
	Romain Jeanty	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-3,5-12,14-21 and 23-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-12, 14-21, and 23-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Final Office action is response to the communication received on November 2, 2006. Claims 1-3, 5-12, 14-21, and 23-27 are pending in the application.

Response to Arguments

2. Applicant's arguments filed on November 2, 2006 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 5-12, 14-21 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melchione et al (US 5,930,764).

As per claim 1, 10 and 19, Melchione teaches generating data sets (column 5, line 34: "database" which contains sets of data) for use in customer relationship marketing (column 5, lines 55-57: "target optimum groups of customers for each marketing campaign conducted.") comprising: specifying one or more variable groups (column 20, line 1-2: "summary variables"), where the group is a set of analytic variables with similar characteristics and the analytic variables are comprised of both primitives and conditions (column 20, line 4:

"characteristics" whereby the data is sorted according to set characteristics it has in common. And it is known that SQL databases utilize primitives and conditions to sort data); creating an analytic data set template containing one or more of the analytic variables selected from the specified variable groups and required for a specific analysis task, wherein execution conditions are defined for the analytic data set template (column 17, lines 62-67: "If the user requests and saves the keys, the user can then use the saved keys to pick up different set of fields (using the data extractor component of the database engine) at different times. Alternatively, the user can further reduce the set of keys (and save the new set, instead of, or in addition to the old set of keys) by applying additional criteria to the old set." Where the data extractor is used as a template for entering search criteria. Templates are known with SQL databases as well as the use of conditional statements for sorting the data.); and generating SQL statements to retrieve and generate analytic variables contained in the template from the database using the primitives and conditions of the analytic variables (column 18, lines 24-30: The data extractor component of the database engine 40, which can execute alone or with the first key extract component, has the function of pulling the desired data from the database once the keys have been extracted. If it executes with the first component, the keys may not even have to be saved on a table but passed through host program variables from previous SQL statements." Melchione utilizes a SQL database which means that the SQL query language is used to structure queries and extract information from the database. SQL is known to contain primitives which are basic operations used to support more complex operations such as functions, procedures and methods. Conditions are also inherent to the SQL language as they utilize the word "if" with a conditional statement. SQL also contains variables or characteristics used to represent a value or expression

and can be replaced with real data to process different data sets. SQL was developed by IBM in the 1970s and has become an ISO and ANSI standard for querying relational databases. SQL is a database query and programming language widely used for accessing, querying, updating, and managing data in relational database systems. Using SQL, you can retrieve data from a database, create databases and database objects, add data, modify existing data, and perform other, more complex functions. With SQL, you can also change the server configuration, modify database or session settings, and control data and access.).

As per claim 2, 11 and 20, Melchione teaches the database contains operational data (column 18, line 61: "data from a household and/or customer" where household and customer data represent operational data) and the analytic variables are derived from the operational data (column 20, lines 1-2: "flags and summary variables at the household level" indicate the variables are derived from the operational data sets of customer and household data).

As per claim 3, 12 and 21, Melchione teaches operational data comprises transaction data (column 28, line 4: "transaction reporting" indicates transaction data is eligible for searching in the database).

As per claim 5, 14 and 23, Melchione teaches the primitives are base variables (column 8, lines 11-14: "three-tier hierarchy so that it can be accessed selectively at household, customer, and account levels" where the base variables are represented by household, customer and account level).

As per claim 6, 15 and 24, Melchione teaches the conditions are predicates, aggregates or functions (column 22, lines 49-60 where the condition of geographic location is selected and the

system selects those that meet the condition. Performing this function is representative of an aggregate which calculates and provides the value required).

As per claim 7, 17 and 25, Melchione teaches the specifying step (a) comprises performing a smart variable definition that allows the user to define multiple analytic variables that are variations on a base variable (column 22, lines 10-20: "n general, when on an account path the user will specify not only product related conditions using variables that are totally dependent on the account/product, such as financial (account balance, amount of transfers, etc.) and descriptive (open date, marketing status) variables, but also other conditions using variables that are indirectly related to the account, such as organization level, geographic location, and so forth. Relationally, these other variables are part of foreign keys, and their presence in the account row establishes the relationship between the Account entity and the ORG or Geographic entities." where multiple variables are used such as "geographic location" that are indirect to the base variable of "customer".).

As per claim 8, 18 and 26, Melchione teaches the creating step (b) comprises defining execution conditions for the analytic data set template (column 17, lines 55-61: "The second component (the data extractor component), picks up all the data items that the user wants. Both components can work together in a single job, or the user can save the keys for further processing at another time. Furthermore, certain types of queries need not extract keys at all, but can obtain the data directly without intermediate key extraction steps." where the keys are criteria or conditions for running the extractor.).

As per claim 9, 19 and 27, Melchione teaches the generated instructions contain variable transformation information, where transaction data from the database is identified, aggregated

or modified to generate the analytic variables (column 33, lines 60-column 34, lines 1-2: "The branch managers and bank officers, in turn, use the CCIS 13 as a tracking and reporting management tool to automatically capture daily sales information. The branch managers and officers access the detailed sales transactions for each personal banker using the CCIS 13, and view the sales results for the various campaigns to track the performance and make adjustments in the campaigns as necessary. The branch managers and bank officers can also use the CCIS 13 to reassign leads among personal bankers and/or branches to optimize the use of marketing resources.").

Remarks

5. Applicants' attorney asserted that Melchione does not teach the claimed invention. Applicants further supported their assertion by arguing that the Melchione reference does not teach or suggest specifying one or more Variables Groups each Variable Group is a set of one or more Analytic Variables with similar characteristics and each Analytic Variable is comprised of both primitives and conditions. In response, the examiner respectfully with the applicants' attorney because Melchione teaches product related conditions using analytic variables that are totally dependent on the product, such as financial (account balance, amount of transfers, etc.) and descriptive (open date, marketing status) variables (col. 28, lines 5-14; col. 22, lines 10-45).

In addition, applicants' attorney argues that there is no discussion in the portions of Melchione of analytic variables that comprised of both primitives, conditions and any groups. In response, the examiner respectfully disagrees because Melchione teaches the concept of analytic variables on the product. Note col. 28, lines 5-14 of Melchione.

In response to applicants' argument that the Office Action assertions that it is known that SQL databases utilize primitives and conditions to sort data are insufficient and based on r hindsight, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). It is noted that Melchione teaches an SQL database for storing conditions (col. 3, lines 19-65).

Furthermore, in response to applicants' argument that the Office Action assertions that templates are known with SQL databases as the use of conditional statements for sorting the data are insufficient and based solely on hindsight, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Romain Jeanty whose telephone number is (571) 272-6732. The examiner can normally be reached on Mon-Thurs 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 18, 2007

Romain Jeanty
Primary Examiner
Art Unit 3623